

## COMMONWEALTH of VIRGINIA

Douglas W. Domenech Secretary of Natural Resources

#### **Lynchburg Office**

7705 Timberlake Road Lynchburg, Virginia 24502 (434) 582-5120 Fax (434) 582-5125

# DEPARTMENT OF ENVIRONMENTAL QUALITY Blue Ridge Regional Office

www.deq.virginia.gov

David K. Paylor Director

Robert J. Weld Regional Director

#### Roanoke Office

3019 Peters Creek Road Roanoke, Virginia 24019 (540) 562-6700 Fax (540) 562-6725

# Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act and 9VAC5-80-50 through 9VAC5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Custom Wood Products, LLC

Facility Name: Custom Wood Products, LLC – Aerial Way Plant

Facility Location: Roanoke, Virginia

Registration Number: 21390

AIRS Number: 51-770-00254 Permit Number: BRRO-21390

Effective Date: March 19, 2008

Amendment Date: **September 26, 2011** 

Expiration Date: March 18, 2013

Robert J. Weld

Regional Director

Signature Date: September 26, 2011

Permit conditions, pages 4 to 35

•

## **Table of Contents**

I.	FACILITY INFORMATION	
II.	EMISSION UNITS	
III.	PROCESS EQUIPMENT REQUIREMENTS - WOODWORKING	7
A.	LIMITATIONS	7
B.	MONITORING	8
C.	Recordkeeping	9
D.	TESTING	9
E.	Reporting	
IV.	PROCESS EQUIPMENT REQUIREMENTS – FINISHING	10
A.	LIMITATIONS	
B.	Monitoring	
C.	RECORDKEEPING	12
D.	TESTING	13
E.	REPORTING	13
V.	FACILITY WIDE CONDITIONS - MACT JJ SPECIFIC REQUIREMENTS	13
A.	LIMITATIONS – WOOD FURNITURE MACT	
	MONITORING – WOOD FURNITURE MACT	
	RECORDKEEPING – WOOD FURNITURE MACT	
	REPORTING – WOOD FURNITURE MACT	
VI.	FACILITY WIDE CONDITIONS	
	RECORD OF MALFUNCTION	
	NOTIFICATION FOR FACILITY OR CONTROL EQUIPMENT MALFUNCTION	
	VIOLATION OF AMBIENT AIR QUALITY STANDARD	
	INSIGNIFICANT EMISSION UNITS	
	PERMIT SHIELD & INAPPLICABLE REQUIREMENTS	
IX.	COMPLIANCE PLAN – NOT APPLICABLE	
X.	GENERAL CONDITIONS	
<b>Λ.</b> Α.		
В.	PERMIT EXPIRATION	
Б. С.	RECORDKEEPING AND REPORTING.	
D.	ANNUAL COMPLIANCE CERTIFICATION	
E.	PERMIT DEVIATION REPORTING	
F.	FAILURE/MALFUNCTION REPORTING	
G.		
Н.		
I.	NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE	
J.	PERMIT MODIFICATION	
K.	PROPERTY RIGHTS	
L.	DUTY TO SUBMIT INFORMATION	
M.		
N.		
O.		
P.	ALTERNATIVE OPERATING SCENARIOS	
Q.		
R.		
S.	PERMIT AVAILABILITY	
T.	TRANSFER OF PERMITS	
U.	MALFUNCTION AS AN AFFIRMATIVE DEFENSE	
V.		

# TABLE OF CONTENTS

### (Continued)

W.	DUTY TO SUPPLEMENT OR CORRECT APPLICATION	.34
X.	STRATOSPHERIC OZONE PROTECTION	. 34
	ASBESTOS REQUIREMENTS	
	ACCIDENTAL RELEASE PREVENTION	
AA.	CHANGES TO PERMITS FOR EMISSIONS TRADING	.34
	EMISSIONS TRADING	

Custom Wood Products, LLC – Aerial Way Plant Permit Number: BRRO-21390 March 19, 2008, modified September 26, 2011 Page 4 of 35

### I. Facility Information

#### **Permittee**

Custom Wood Products, LLC 3304 Aerial Way Drive Roanoke, VA 24018

### **Responsible Official**

John E. Hans President

### **Facility**

Custom Wood Products, LLC – Aerial Way Plant 3304 Aerial Way Drive Roanoke, VA 24018

#### **Contact Person**

Ray Stinson Production Manager 540-342-0363

**Registration Number: 21390** 

County/Plant Identification Number: 51-770-00254

**Facility Description:** SIC Code 2434 NAICS Code: 337110

Custom Wood Products, LLC (CWP) owns and operates a wood cabinet manufacturing and coating facility at 3304 Aerial Way Drive in Roanoke, Virginia. CWP produces only custom cabinets that are designed to meet customer specifications.

The Aerial Way plant currently operates with an annual production rate of approximately 27,000 cabinets per year, while working a single 8-hour shift, with the potential to increase production to 81,000 cabinets per year, while working three 8-hour shifts per day. The plant receives pre-cut boarding and stores these wood pieces on-site for custom processing. Select pieces are then cut, shaped and assembled to meet customer specifications in the building, door, and/or framing woodworking departments. Each piece of woodworking equipment is either vented to an indoor dust collector or vented to the Aerial Way plant's main baghouse to control wood dust emissions. Once the various cabinet components have been cut, shaped and assembled to specifications, they are sent to the coating booths to apply tints, stains, basecoats, and/or topcoats. Coatings are applied using a combination of high volume low-pressure (HVLP) spray guns that operate at air pressures below 10 psi and air-assisted airless spray guns. The Aerial Way plant has eleven coating booths with each containing dry filters that collect particulate matter emissions generated from the coating overspray.

In addition to particulate matter emissions from coating operations, the Aerial Way Plant emits volatile organic compound (VOC) and Hazardous Air Pollutant (HAP) emissions, for

Custom Wood Products, LLC – Aerial Way Plant Permit Number: BRRO-21390 March 19, 2008, modified September 26, 2011 Page 5 of 35

which the plant is considered a major source. Individual HAPs include Toluene, Xylene, Methyl Isobutyl Ketone (MIBK), Methanol, Ethyl benzene, Glycol Ethers, Formaldehyde, Naphthalene, Dimethyl Phthalate, and Hexane.

The Maximum Achievable Control Technology (MACT) standard for wood furniture plants (40 CFR 63 Subpart JJ) applies to the finishing operations portion of the facility as an existing source before the December 7, 1995 MACT applicability date. The plant's primary method for meeting the federal standard is to maintain an average coating ratio of HAPS/solids of less than 1.0 lb VHAP/lb solids. This facility is not a PSD definition major source due to VOC PTE emissions remaining below 250 tons/yr. It is located in an Early Action Compact Area for Ozone and emissions control area for VOC and NOx. The location is regarded as in attainment for other criteria pollutants.

### **II.** Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description	PCD ID	Pollutant Controlled	Original Permit Date
Woodworl	king Equip	ment					
ES-DD	SNBH1	Woodworking – Door Department	120 cabinets/shift <sup>+</sup>	Baghouse	CDBH1	$PM, PM_{10}$	N/A
ES-FD	SNBH1	Woodworking – Framing Department	120 cabinets/shift <sup>+</sup>	Baghouse	CDBH1	$PM, PM_{10}$	N/A
ES-BD	SNBH1	Woodworking – Building Department	120 cabinets/shift <sup>+</sup>	Baghouse	CDBH1	$PM, PM_{10}$	N/A
Finishing 1	Line Equip	ment (MACT JJ subject)					
ES220A	SN220A	Devilbiss 7'8"x12' Wipe/Stain Booth	660 sq .ft./hr	Dry filter	CD220A	$PM, PM_{10}$	N/A
ES225	SN225	Greenline 7'6"x20 Topcoat/Basecoat Booth	660 sq .ft./hr	Dry filter	CD225	$PM, PM_{10}$	N/A
ES227	SN227	Devilbiss 7'6"x12' Topcoat Booth	660 sq .ft./hr	Dry filter	CD227	$PM, PM_{10}$	N/A
ES228	SN228	Devilbiss 7'6"x12' Topcoat Booth	660 sq .ft./hr	Dry filter	CD228	$PM, PM_{10}$	N/A
ES229	SN229	Devilbiss 7'6"x12' Topcoat Booth	660 sq .ft./hr	Dry filter	CD229	$PM, PM_{10}$	N/A
ES230	SN230	Devilbiss 7'6"x14' Topcoat/Basecoat Booth	660 sq .ft./hr	Dry filter	CD230	$PM, PM_{10}$	5/23/06
ES231	SN231	Devilbiss 7'6"x14' Topcoat/Basecoat Booth	660 sq .ft./hr	Dry filter	CD231	PM, PM <sub>10</sub>	5/23/06
ES233	SN233	Custom Built 7'6"x14' Topcoat/Basecoat Booth	660 sq .ft./hr	Dry filter	CD233	PM, PM <sub>10</sub>	5/23/06
ES234	SN234	Superfici Flat Line Booth	1,200 sq .ft./hr	Dry filter	CD234	PM, PM <sub>10</sub>	3/12/09
ES235	SN235	Production System 8' x 12' Toning/Staining Booth	660 sq .ft./hr	Dry filter	CD235	PM, PM <sub>10</sub>	3/12/09
ES236	SN236	Spray System 10' x 14' Toning/Staining Booth	660 sq .ft./hr	Dry filter	CD236	PM, PM <sub>10</sub>	3/12/09

<sup>\* -</sup> The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

<sup>+ -</sup> shift typically is 8 hours in duration.

### III. Process Equipment Requirements - Woodworking

Unit ID # ES-DD Door Department
Unit ID # ES-FD Framing Department
Unit ID # ES-BD Building Department

This group includes all of the plant's wood working processes and equipment, namely equipment in the door department, framing department and building department. All wood dust emission sources are controlled by the Aerial Way baghouse (fabric filter) exhausting to the atmosphere. Some sanding and planing equipment stations utilize Delta indoor vacuum-type dust collectors for indoor particulate control.

The above-referenced woodworking equipment is a mix of both "existing" and "new or modified" under Virginia Regulations, that is, it is equipment constructed or installed both before and after March 17, 1972. With this being the case, CWP's woodworking equipment is subject to existing stationary source standards contained in Virginia Regulations 9 VAC 5 Chapter 40 – Article 17: Emission Standards for Woodworking Operations, as well as 9 VAC 5 Chapter 50, Article 4: Standards of Performance for Stationary Sources. There is no applicable federal New Source Performance Standard (NSPS – 40 CFR 60) at this time for this process. The Maximum Achievable Control Technology (MACT) standard for wood furniture plants (40 CFR 63 Subpart JJ) does not apply to the woodworking materials and processes that are currently used at this plant.

#### A. Limitations

- 1. **Process Control** (Unit ID # ES101 ES111: Door Department; Unit ID # ES181 ES190: Framing Department; Unit ID # ES120 ES128: Building Department): No owner or other person shall cause or permit to be discharged any particulate emissions caused by any woodworking operation without providing, as a minimum, for their collection, adequate duct work and properly designed collectors, or other such devices, as approved by the Board. (9VAC5-80-110 and 9VAC5-40-2270 A)
- 2. **Emission Limitations** (Unit ID # ES101 ES111: Door Department; Unit ID # ES181 ES190: Framing Department; Unit ID # ES120 ES128: Building Department): Particulate emissions from all wood dust control device exhausts shall not exceed the limits specified below:

 Total Particulate
 0.05 gr/dscf
 19.67 lbs/hr
 86.15 tons/yr

 PM-10
 0.05 gr/dscf
 19.67 lbs/hr
 86.15 tons/yr

 86.15 tons/yr
 86.15 tons/yr

(9VAC5-80-110, 9VAC5-40-2270 B and 9VAC5-50-10 D)

3. **Visible Emission Limitations** - (Unit ID # ES-DD: Door Department; Unit ID # ES-FD: Framing Department; Unit ID # ES-BD: Building Department): No owner or other person shall cause or permit to be discharged into the atmosphere from any wood dust emission point any visible emissions which exhibit greater than twenty percent (20%) opacity, except for one six-minute period in any one hour of not more

than thirty percent (30%) opacity. (9VAC5-80-110, 9VAC5-50-80)

- 4. **Operation & Maintenance Procedures** The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to the Aerial Way baghouse and process equipment which affect such emissions:
  - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
  - b. Develop an inspection schedule, monthly at a minimum, to insure the operational integrity of the fabric filters and maintain records of inspection results.
  - c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
  - d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.
  - e. Maintain an inventory of spare parts that are needed to maintain the control device(s) in proper working order to minimize emissions.

Records of maintenance, inspections and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request. (9VAC5-80-110 and 9VAC5-40-20E)

### **B.** Monitoring

- 1. **Control Device Monitoring** The Aerial Way baghouse shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. The pressure drop shall be recorded weekly. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times.
  - (9VAC5-40-20 and 9VAC5-80-110)
- 2. **Visible Emissions Monitoring** The Aerial Way baghouse shall be observed visually at least once each calendar week in which the baghouse operates. The visual observations shall be conducted using 40 CFR 60 Appendix A Method 22 type techniques (condensed water vapor/steam is not a visible emission) for at least a brief time to only identify the presence of visible emissions. If visible emissions are observed from the baghouse, it shall be evaluated by conducting a 40 CFR 60 Appendix A Method 9 visible emissions evaluation (VEE) for at least six (6) minutes, unless corrective action is taken that achieves no visible emissions. 40 CFR 60

Custom Wood Products, LLC – Aerial Way Plant Permit Number: BRRO-21390 March 19, 2008, modified September 26, 2011 Page 9 of 35

Appendix A Method 9 requires the observer to have a Method 9 certification that is current at the time of the VEE. If any of these six (6) minute VEE averages exceed the unit's opacity limitation, a VEE shall be conducted on these emissions for at least three (3) six-minute periods (at least 18 minutes). All visible emission observations, VEE results, and corrective actions taken shall be recorded. (9VAC5-80-110E)

### C. Recordkeeping

On Site Records - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

- 1. Weekly records of pressure drop across the baghouse fabric filter.
- 2. Records of modified Method 22 observations of the baghouse, including corrective actions or Method 9 observations if opacity was observed.
- 3. Records of scheduled and unscheduled maintenance to the baghouse and process equipment affecting baghouse emissions.
- 4. Records of baghouse inspections.
- 5. Copies of operating procedures for woodworking equipment and records of operator training.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9VAC5-40-50 and 9VAC5-80-110)

Also see Facility Wide Conditions and Recordkeeping under the General Conditions section.

### **D.** Testing

**Emissions Testing** - If testing is conducted in addition to the monitoring specified in this permit to demonstrate compliance with the requirements of the permit, the permittee shall use methods and procedures approved by the DEQ. (9VAC5-80-110)

### E. Reporting

See Reporting under the General Conditions.

### IV. Process Equipment Requirements – Finishing

Unit ID # ES220A	Devilbiss 7' 8" x 12' Wipe/Stain Booth
Unit ID # ES225	Greenline 7' 6" x 20' Topcoat/Basecoat Booth
Unit ID # ES227	<b>Devilbiss 7' 6" x 12' Topcoat Booth</b>
Unit ID # ES228	Devilbiss 7' 6" x 12' Topcoat Booth
Unit ID # ES229	Devilbiss 7' 6" x 12' Topcoat Booth
Unit ID # ES230	Devilbiss 7' 6" x 12' Topcoat/Basecoat Booth
Unit ID # ES231	Devilbiss 7' 6" x 12' Topcoat/Basecoat Booth
Unit ID # ES233	Custom Built 7' 6" x 14' Topcoat/Basecoat Booth
Unit ID # ES234	Superfici Flat Line Booth
Unit ID # ES235	Production System 8' x 12' Toning/Staining Booth
Unit ID # ES236	Spray System 10' x 14' Toning/Staining Booth

#### A. Limitations

1. **Emission Controls -** Particulate emissions (PM & PM-10) emissions from all coating booths shall be controlled by dry filters. The dry filters shall be provided with adequate access for inspection and shall be in operation when the coating booths are operating.

(9VAC5-80-110 and Condition 2 of 8/25/2011 Permit)

2. **Control Efficiency -** The dry filters shall maintain a control efficiency for PM and PM-10 of no less than 95 percent, to be determined by vendor information, or other DEQ approved method.

(9VAC5-80-110 and Condition 3 of 8/25/2011 Permit)

3. VOC Work Practice Standards - At all times the disposal of volatile organic compounds shall be accomplished by taking measures, to the extent practicable, consistent with air pollution control practices for minimizing emissions. Volatile organic compounds shall not be intentionally spilled, discarded in sewers which are not connected to a treatment plant, or stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution practices for minimizing emissions.

(9VAC5-80-110 and Condition 4 of 8/25/2011 Permit)

4. **Emission Limits** - Combined emissions from the operation of the coating booths shall not exceed the limits specified below:

Particulate Matter (PM)	7.7 tons/yr
PM-10	7.7 tons/yr
Volatile Organic Compounds	218.7 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of the emission limits. Compliance with these emission

Custom Wood Products, LLC – Aerial Way Plant Permit Number: BRRO-21390 March 19, 2008, modified September 26, 2011 Page 11 of 35

limits may be determined as stated in Conditions IV.A.1, IV.A.2, and IV.C

(9VAC5-80-110 and Condition 7 of 8/25/2011 Permit)

5. **Visible Emission Limits** - Visible emissions from the coating booths shall not exceed five percent (5%) opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).

(9VAC5-80-110 and Condition 8 of 8/25/2011 Permit)

6. **Maintenance/Operating Procedures** – At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practical, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance;
- b. Maintain an inventory of spare parts;
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum;
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance, inspections and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request. (9VAC5-80-110 and Condition 13 of 8/25/2011 Permit)

### **B.** Monitoring

- 1. **Control Device Observation** To ensure good performance, the coating booth dry filters shall be observed by the permittee with a frequency of not less than as recommended by the coating booth or dry filter manufacturer. The permittee shall keep a log of the observations, maintenance, and replacement of the dry filters. (9VAC5-80-110 and Condition 5 of 8/25/2011 Permit)
- 2. **Visible Emissions Monitoring** Each coating booth shall be observed visually at least once each calendar week in which the respective booth operates. The visual

Custom Wood Products, LLC – Aerial Way Plant Permit Number: BRRO-21390 March 19, 2008, modified September 26, 2011 Page 12 of 35

observations shall be conducted using 40 CFR 60 Appendix A Method 22 type techniques (condensed water vapor/steam is not a visible emission) for at least a brief time to only identify the presence of visible emissions. If visible emissions are observed from any booth, it shall be evaluated by conducting a 40 CFR 60 Appendix A Method 9 visible emissions evaluation (VEE) for at least six (6) minutes, unless corrective action is taken that achieves no visible emissions. 40 CFR 60 Appendix A Method 9 requires the observer to have a Method 9 certification that is current at the time of the VEE. If any of these six (6) minute VEE averages exceed the unit's opacity limitation, a VEE shall be conducted on these emissions for at least three (3) six-minute periods (at least 18 minutes). All visible emission observations, VEE results, and corrective actions taken shall be recorded. (9VAC5-80-110E)

### C. Recordkeeping

On Site Records - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

- 1. Annual throughput of finishing materials, coatings, thinners, and cleaning solvents (in gallons), calculated monthly as the sum of each consecutive 12-month period.
- 2. Control efficiency vendor information, or other DEQ approved method, of the coating booth dry filters.
- 3. Material Safety Data Sheets (MSDS), Certified Product Data Sheets (CPDS) or other vendor information as approved by DEQ showing VOC content, toxic compound content, HAP content, water content, and solids content for each finishing material, coating, thinner, and cleaning solvent used.
- 4. Monthly and annual emissions calculations for PM and PM-10 from the coating booths using calculation methods approved by the DEQ. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. The consecutive 12-month period sum shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- 5. A monthly and annual material balance of VOC (in tons) from the coating booths. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. The consecutive 12-month period sum shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. It should be noted that t-butyl acetate is a VOC for purposes of all recordkeeping, emission reporting, photochemical dispersion modeling, and inventory requirements that apply to VOCs, and shall be uniquely identified in emission reports. However, t-butyl acetate is not a VOC for

Permit Number: BRRO-21390

March 19, 2008, modified September 26, 2011

Page 13 of 35

purposes of VOC emission standards, VOC emission limitations, or VOC content requirements.

- 6. Operation, maintenance, and replacement logs for the coating booth dry filters as required by Condition IV.B.1.
- 7. Scheduled and unscheduled maintenance, and operator training.
- 8. Records of modified Method 22 observations of the spray booths, including corrective actions or Method 9 observations if opacity was observed.
- 9. Results of all stack tests, visible emission evaluations, and performance evaluations.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9VAC5-80-110 and Condition 9 of 8/25/2011 Permit)

Also see Facility Wide Conditions and Recordkeeping under the General Conditions section.

### **D.** Testing

**Emissions Testing** - The coating booths shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.

(9VAC5-80-110 and Condition 10 of 8/25/2011 Permit)

### E. Reporting

Also see Reporting under the Facility Wide and General Conditions.

### V. Facility Wide Conditions – MACT JJ Specific Requirements

The facility is to be operated in compliance with Federal requirements under 40 CFR Part 63 Subpart JJ, including future revisions. All terms used regarding 40 CFR 63 Subpart JJ shall have the meanings as defined in 40 CFR 63.801 and 40 CFR 63.2. The terms and conditions below are from 40 CFR 63 Subpart JJ.

(9VAC5-80-110, 9VAC5-60-100, 40 CFR 63.800, 40 CFR 63 Subpart A, and Condition 6 of 8/25/2011 Permit)

### A. Limitations - Wood Furniture MACT

- 1. **Emission Standards** Volatile Hazardous Air Pollutant (VHAP) emissions from the facility shall not exceed the following limits:
  - a. For finishing operations use any of the following methods:

Custom Wood Products, LLC – Aerial Way Plant Permit Number: BRRO-21390 March 19, 2008, modified September 26, 2011 Page 14 of 35

- (i) Achieve a weighted average VHAP content across all coatings of 1.0 lb VHAP/lb solids, as applied;
- (ii) Use compliant finishing materials that meet the following specifications:
  - (a) Each sealer and topcoat has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
  - (b) Each stain has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
  - (c) Each thinner contains no more than 10.0 percent VHAP by weight except where excluded by (e) of this sub-section.;
  - (d) Each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
  - (e) Each washcoat, basecoat, and enamel that is formulated onsite is formulated using a finishing material containing no more than 1.0 lb VHAP/lb solids and a thinner containing no more than 3.0 percent VHAP by weight;
- (iii)Use any combination of averaging and compliant coatings such that no greater than 1.0 lb of VHAP being emitted per lb of solids used;
- b. For cleaning operations strippable spray booth coatings shall be used that contain no more than 0.8 lb VOC/lb solids, as applied:
- c. Compliant contact adhesives shall be used based on the following criteria:
  - (i) For aerosol adhesives, as well as hot melt, PVA, and urea-formaldehyde adhesives, and for contact adhesives applied to nonporous substrates there is no limit on the VHAP content of these adhesives;
  - (ii) For foam adhesives used in products that meet flammability requirements the VHAP content can be no more than 1.8 lb VHAP/lb solids, as applied;
  - (iii)For all other contact adhesives the VHAP content can be no more than 1.0 lb VHAP/lb solids, as applied:

(9VAC5-80-110, 9VAC5-60-100, and 40 CFR 63.802)

- 2. **Work Practice Standards** The permittee shall develop and implement the following work practice standards:
  - a. Work practice implementation plan
    - (i) The permittee shall prepare and maintain a written work practice

Custom Wood Products, LLC – Aerial Way Plant Permit Number: BRRO-21390 March 19, 2008, modified September 26, 2011 Page 15 of 35

implementation plan that defines environmentally desirable work practices for the finishing and gluing operations and addresses each of the work practice standards presented in Conditions V.A.2.b. through V.A.2.l. that follow. The plan shall be developed no more than 60 days after the compliance date.

- (ii) The written work practice implementation plan shall be available for inspection by the Administrator upon request. If the Administrator determines that the work practice implementation plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the Administrator may require the permittee to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Title V permit.
- (iii) The inspection and maintenance plan required by Condition V.A.2.c and the formulation assessment plan for finishing operation required by V.A.2.1 are also reviewable by the Administrator.
- b. Operator training course The permittee shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment in these operations, or implementation of the requirements of 40 CFR Part 63 Subpart JJ. All new personnel shall be trained upon hiring. All existing personnel shall be trained within six months of the compliance date. All personnel shall be given refresher training annually. The permittee shall maintain a copy of the training program with the work practice implementation plan. The training program shall include, at a minimum, the following:
  - (i) A list of all current personnel by name and job description that are required to be trained;
  - (ii) An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;
  - (iii)Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes, and
  - (iv) A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.
- c. <u>Inspection and maintenance plan</u> The permittee shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:

Custom Wood Products, LLC – Aerial Way Plant Permit Number: BRRO-21390 March 19, 2008, modified September 26, 2011 Page 16 of 35

- (i) A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic HAP solvents;
- (ii) An inspection schedule;
- (iii)Methods for documenting the date and results for each inspection and any repairs that were made;
- (iv) The timeframe between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule;
  - (a) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and
  - (b) Final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed with three months.
- d. <u>Cleaning and washoff solvent accounting system</u> The permittee shall develop an organic HAP solvent accounting form to record:
  - (i) The quantity and type of organic HAP solvent used each month for washoff and cleaning, as defined in 40 CFR 63.801;
  - (ii) The number of pieces washed off, and the reason for the washoff; and
  - (iii) The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.
- e. <u>Chemical composition of cleaning and washoff solvents</u> The permittee shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 of 40 CFR Part 63 Subpart JJ, in concentrations subject to MSDS reporting as required by OSHA.
- f. Spray booth cleaning The permittee shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters, unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the permittee shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.
- g. <u>Storage requirements</u> The permittee shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.

- h. <u>Application equipment requirements</u> The permittee shall use conventional air spray guns to apply finishing materials only under any of the following circumstances:
  - (i) To apply finishing materials that have a VOC content no greater than 1.0 lb VOC/lb solids, as applied;
  - (ii) For touchup and repair under the following conditions:
    - (a) The touchup and repair occurs after completion of the finishing operation; or
    - (b) The touchup and repair occurs after the application of stain and before the application of any other type of finishing material, and materials used for touchup and repair are applied from a container that has a volume of no more than 2.0 gallons.
  - (iii)When spray is automated, that is, the spray gun is aimed and triggered automatically, not manually;
  - (iv) When emissions from the finishing application station are directed to a control device;
  - (v) The conventional air gun is used to apply finishing materials and the cumulative total usage of that finishing material is no more than 5.0 percent of the total gallons of finishing material used during that semiannual period; or
  - (vi) The conventional air gun is used to apply stain on a part for which it is technically or economically infeasible to use any other spray application technology. The permittee shall demonstrate technical or economic unfeasibility by submitting to the Administrator a videotape, a technical report, or other documentation that supports the permittee's claim of technical of economic unfeasibility. The following criteria shall be used, either independently or in combination, to support the permittee's claim of technical or economic unfeasibility:
    - (a) The production speed is too high or the part shape is too complex for one operator to coat the part and the application station is not large enough to accommodate an additional operator; or
    - (b) The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.
- i. <u>Line Cleaning</u> The permittee shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container.

- j. <u>Gun cleaning</u> The permittee shall collect all organic HAP solvent used to clean spray guns into a normally closed container.
- k. <u>Washoff operations</u> The permittee shall control emissions from washoff operations by:
  - (i) Using normally closed tanks for washoff; and
  - (ii) Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.
- 1. <u>Formulation assessment plan for finishing operations</u> The permittee shall prepare and maintain with the work practice implementation plan a formulation assessment plan that:
  - (i) Identifies VHAP from the list presented in Table 5 of 40 CFR Part 63 Subpart JJ that are being used in finishing operations;
  - (ii) Establishes a baseline level of usage for each VHAP identified. The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996, for each VHAP identified, except for formaldehyde and styrene which shall be determined as specified by 40 CFR 63.803 (1)(2).

For VHAPs that do not have a baseline, one will be established according to Condition V.A.2.l(vi).

- (iii)Tracks the annual usage of each VHAP identified in Condition V.A.2.l(i), which is present in amounts subject to MSDS reporting as required by OSHA.
- (iv) If the annual usage of the VHAP identified exceeds its baseline level, then the permittee shall provide a written notification to the Blue Ridge Regional Office, which describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the owner or operator from further action, unless the affected source is not in compliance with any State regulations or requirements for that VHAP:
  - (a) The exceedance is no more than 15.0 percent above the baseline level;
  - (b) Usage of the VHAP is below the de minimis level presented in Table 5 of 40 CFR Part 63 Subpart JJ for that VHAP;
  - (c) The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP; or
  - (d) The source of the pollutant is a finishing material with a VOC content of

Custom Wood Products, LLC – Aerial Way Plant Permit Number: BRRO-21390 March 19, 2008, modified September 26, 2011 Page 19 of 35

no more than 1.0 lb VOC/lb solids, as applied.

- (v) If none of the explanations listed in Condition V.A.2.l(iv) are the reasons for the increase, the permittee shall confer with the Blue Ridge Regional Office, to discuss the reason for the increase and whether there are practical and reasonable technology-based solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical shall be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the Blue Ridge Regional Office, and the owner or operator. If there are no practical and reasonable solutions, the facility need take no further action. If there are solutions, the owner or operator shall develop a plan to reduce the usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.
- (vi) If the permittee uses a VHAP of potential concern listed in Table 6 of 40 CFR Part 63 Subpart JJ for which a baseline level has not been previously established, then the baseline level shall be established as the de minimis level provided in that same table for that chemical. The permittee shall track the annual usage of each VHAP of potential concern identified that is present in amounts subject to MSDS reporting as required by OSHA. If usage of the VHAP of potential concern exceeds the de minimis level listed in Table 6 of 40 CFR Part 63 Subpart JJ for that chemical, then the permittee shall provide an explanation to the Blue Ridge Regional Office, that documents the reason for the exceedance of the de minimis level. If the explanation is not one of those listed in Condition V.A.2.l(iv), the affected source shall follow the procedures established in Condition V.A.2.l(v).

(9VAC5-60-100, 9VAC5-80-110, and 40 CFR 63.803(a)-(l))

- 3. **Operation & Maintenance** The permittee shall meet the following operation and maintenance requirements:
  - a. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.
  - b. Malfunctions shall be corrected as soon as practicable after their occurrence.
  - c. Operation and maintenance requirements established pursuant to section 112 of the Clean Air Act are enforceable independent of emissions limitations or other requirements in relevant standards.

d. Determination of whether operation and maintenance procedures are being used will be based on information available to the DEQ which may included, but is not limited to, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(9VAC5-60-100, 9VAC5-80-110, and 40 CFR 63.6(e))

### **B.** Monitoring – Wood Furniture MACT

**Continuous compliance** - The VHAP emissions limits shall be determined as follows:

1. For finishing operations when averaging is being used to show continuous compliance, the permittee shall submit the results of the averaging calculation (Equation 1) for each month within that semiannual period and submitting a compliance certification with the semiannual report. The compliance certification shall state that the value of (E), as calculated by Equation 1, is no greater than 1.0. The facility is in violation of the standard if E is greater than 1.0 for any month. A violation of the monthly average is a separate violation of the standard for each day of operation during the month, unless the affected source can demonstrate through records that the violation of the monthly average can be attributed to a particular day or days during the period.

$$E = (M_{c1}C_{c1} + M_{c2}C_{c2} + ... + M_{cn}C_{cn} + S_1W_1 + S_2W_2 + ... S_nW_n)/(M_{c1} + M_{c2} + ... + M_{cn})$$

$$= (M_{c1}C_{c1} + M_{c2}C_{c2} + ... + M_{cn}C_{cn} + S_1W_1 + S_2W_2 + ... S_nW_n)/(M_{c1} + M_{c2} + ... + M_{cn})$$

$$= (M_{c1}C_{c1} + M_{c2}C_{c2} + ... + M_{cn}C_{cn} + S_1W_1 + S_2W_2 + ... S_nW_n)/(M_{c1} + M_{c2} + ... + M_{cn})$$

$$= (M_{c1}C_{c1} + M_{c2}C_{c2} + ... + M_{cn}C_{cn} + S_1W_1 + S_2W_2 + ... S_nW_n)/(M_{c1} + M_{c2} + ... + M_{cn})$$

E = the emission limit achieved by an emission point or a set of emission points, in lb VHAP/lb solids.

Mc = the mass of solids in a finishing material or coating (c) used monthly, including exempt finishing materials and coatings, lb solids/month.

Cc = the VHAP content of a finishing material or coating (c), in pounds of VHAP per pound of coating solids.

S = the VHAP content of a solvent, expressed as a weight fraction, added to finishing materials or coatings.

W = the amount of solvent, in pounds, added to finishing materials and coatings during the monthly averaging period.

The Emission Limit (E in lb VHAP / lb solids) equals the sum, for all finishing materials and coatings, of the mass of solids in each material used within that month ( $M_c$  in lb solids / month) multiplied by the VHAP content in each material ( $C_c$  in lb VHAP / lb solids) plus the sum, for all solvents, of the mass of solvent used monthly (W in lb solvent / month) multiplied by the weight fraction of VHAP in the solvent (S in lb VHAP / lb solvent), with this total being divided by the sum, for all finishing materials and coatings, of the mass of solids in each finishing material and coating used within that month ( $M_c$  in lb solids / month).

2. For finishing operations when compliant coatings are being used to show continuous compliance, the permittee shall use compliant coatings and thinners, maintain records that demonstrate the finishing materials and thinners are compliant, and submit a compliance certification with the semiannual report which states that compliant

Custom Wood Products, LLC – Aerial Way Plant Permit Number: BRRO-21390 March 19, 2008, modified September 26, 2011 Page 21 of 35

stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as stated in Condition V.A.1, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. The facility is in violation of the standard whenever a noncompliant coating, as demonstrated by records or by a sample of the coating, is used.

- 3. For contact adhesive operations when compliant adhesives are being used to show compliance, the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that compliant contact and/or foam adhesives have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant contact and/or foam adhesives were used. Each day a noncompliant contact or foam adhesive is used is a single violation of the standard.
- 4. For strippable spray booth coatings the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that compliant strippable spray booth coatings have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant materials were used. Each day a noncompliant strippable booth coating is used is a single violation of the standard.
- 5. For work practice standards the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that the work practice implementation plan is being followed, or should otherwise identify the provisions of the plan that have not been implemented and each day the provisions were not implemented. During any period of time that the permittee is required to implement the provisions of the plan, each failure to implement an obligation under the plan during any particular day is a violation and the Administrator may require the permittee to modify the plan (see Condition V.A.2.a).

(9VAC5-60-100, 9VAC5-80-110, and 40 CFR 63.804(g) & 40 CFR 63.8)

### C. Recordkeeping – Wood Furniture MACT

On Site Records - The permittee shall maintain records of the following:

- 1. For emission limit purposes, the permittee shall maintain the following:
  - a. A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to the emission limits in Condition V.A.1,
  - b. The VHAP content, in lb VHAP/lb solids, as applied, of each finishing material and contact adhesive subject to the emission limits in Conditions V.A.1.a and V.A.1.c; and
  - c. The VOC content, in lb VOC/lb solids, as applied, of each strippable booth

coating subject to the emission limits in Condition V.A.1.b.

- 2. Following the averaging method the permittee shall maintain copies of the averaging calculation for each month following the compliance date, as well as the data on the quantity of coatings and thinners used that is necessary to support the calculation of E in Equation 1 (as defined in Condition V.B.1).
- 3. The permittee shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:
  - a. Records demonstrating that the operator training program required by Condition V.A.2.b is in place;
  - b. Records collected in accordance with the inspection and maintenance plan required by Condition V.A.2.c;
  - c. Records associated with the cleaning solvent accounting system required by Condition V.A.2.d;
  - d. Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with conventional air spray guns for each semiannual period required by Condition V.A.2.h;
  - e. Records associated with the formulation assessment plan required by Condition V.A.2.l; and
  - f. Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.
- 4. The permittee shall maintain records of the compliance certifications submitted for each semiannual period following the compliance date.
- 5. The permittee shall maintain records of all other information submitted with the compliance status report and the semiannual reports.
- 6. The permittee shall maintain files of all information (including all reports and notifications) required, recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be retained on site. The remaining three (3) years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

Page 23 of 35

(9VAC5-60-100, 9VAC5-80-110, and 40 CFR 63.806 & 63.10(b)(1))

### **D.** Reporting – Wood Furniture MACT

- 1. **Notification of Compliance** Each time a notification of compliance status is required (see Condition X.C), the permittee shall submit to the Blue Ridge Regional Office, a notification of compliance status, signed by a responsible official of the company that owns or operates the facility who shall certify its accuracy, attesting to whether the source has complied with 40 CFR Part 63 Subpart JJ. The notification shall list:
  - a. The methods that were used to determine compliance;
  - b. The results of any performance tests, opacity or visible emission observations, and/or other monitoring procedures or methods that were conducted;
  - c. The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;
  - d. The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified;
  - e. An analysis demonstrating whether the facility is a major source or an area source (using the emissions generated for this notification);
  - f. A statement by the permittee as to whether the facility has complied with Subpart JJ as expressed in this permit.

Copies of each notification shall be sent to:

### U. S. EPA Region III

Air Protection Division (3AP00)

ATTN: Wood Furniture NESHAP (40 CFR 63 Subpart JJ) Coordinator

1650 Arch Street

Philadelphia, PA 19103 - 2029.

### Virginia DEQ

Blue Ridge Regional Office Attn: Air Compliance Manager 3019 Peters Creek Road Roanoke, VA 24019

(9VAC5-60-100, 9VAC5-80-110, and 40 CFR 63.9(h))

2. **Report Submittals** - Reporting not otherwise required by this permit shall consist of the following:

- a. The permittee when demonstrating continuous compliance shall submit a semiannual report covering the previous six (6) months of wood furniture manufacturing operations (see Condition X.C.3):
  - (i) Reports shall cover the time periods each calendar year from January 1 to June 30 and July 1 to December 31, and shall be submitted no later than <u>January 30</u> and <u>July 30</u> of each calendar year, as required by 40 CFR 63.807(c)(2).
  - (ii) The semiannual reports shall include the information required by Condition V.B, a statement of whether the facility was in compliance or noncompliance, and, if the facility was in noncompliance, the measures taken to bring the facility into compliance.
- b. The permittee, when required to provide a written notification by Condition V.A.2.l(iv) for exceedance of a baseline level [40 CFR 63.803(1)(4)], shall include in the notification one or more statements that explains the reasons for the usage increase. The notification shall be submitted no later than 30 calendar days after the end of the annual period in which the usage increase occurred.

Copies of reports shall be submitted to the U.S. Environmental Protection Agency and Virginia DEQ at the addresses given in Condition V.D.1. (9VAC5-60-100, 9VAC5-80-110, and 40 CFR 63.807 & 63.10(d))

### **VI.** Facility Wide Conditions

### A. Record of Malfunction

Records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record. (9VAC5-80-110, 9VAC5-20-180 J, 9VAC5-80-1180 D, and Condition 14 of 8/25/2011 Permit)

### **B.** Notification for Facility or Control Equipment Malfunction

The permittee shall furnish notification to the Blue Ridge Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone, or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of the discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify Blue Ridge Regional Office in writing.

(9VAC5-80-110, 9VAC5-20-180, Condition 15 of 8/25/2011 Permit)

### C. Violation of Ambient Air Quality Standard

The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.

(9VAC5-80-110, 9VAC5-20-180, 9VAC5-80-1180, and Condition 16 of 8/25/2011 Permit)

### VII. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9VAC5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720 B)	Rated Capacity (5-80-720 C)
ES224	Blow-Off Tack Booth	9VAC5- 80-720 B	PM, PM <sub>10</sub>	120 cabinets/shift
IA233	Back Wall Oven Booth Vent	9VAC5- 80-720 B	PM, PM <sub>10</sub> , SO <sub>2</sub> , CO, NOx, VOC	120 cabinets/shift
NG-Insig	22 HVAC/Air Make-up units fired with natural gas	9VAC5- 80-720 C	PM, PM <sub>10</sub> , SO <sub>2</sub> , CO, NOx, VOC	Less than 10 MMBtu/hr each

These insignificant emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9VAC5-80-110.

### VIII. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability	
40 CFR 64	Compliance Assurance Monitoring	N/A – units < 100 tpy potential	
40 CFR 63	MACT DDDD	N/A – no kilns or glue presses	

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air

Custom Wood Products, LLC – Aerial Way Plant Permit Number: BRRO-21390 March 19, 2008, modified September 26, 2011 Page 26 of 35

Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain (i) information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law. (9VAC5-80-140)

### IX. Compliance Plan – not applicable

### X. General Conditions

### A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9VAC5-80-110 N)

### **B.** Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the effective date of this permit. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9VAC5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

- 1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- 2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9VAC5-80-150.
- 3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9VAC5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
- 4. If an applicant submits a timely and complete application under section 9VAC5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9VAC5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
- 5. The protection under subsections F 1 and F 5 (ii) of section 9VAC5-80-80 F shall

Custom Wood Products, LLC – Aerial Way Plant Permit Number: BRRO-21390 March 19, 2008, modified September 26, 2011 Page 27 of 35

cease to apply if, subsequent to the completeness determination made pursuant section 9VAC5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9VAC5-80-80 B, C and F, 9VAC5-80-110 D and 9VAC5-80-170 B)

### C. Recordkeeping and Reporting

- 1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
  - a. The date, place as defined in the permit, and time of sampling or measurements.
  - b. The date(s) analyses were performed.
  - c. The company or entity that performed the analyses.
  - d. The analytical techniques or methods used.
  - e. The results of such analyses.
  - f. The operating conditions existing at the time of sampling or measurement.

(9VAC5-80-110 F)

- 2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (9VAC5-80-110 F)
- 3. The permittee shall submit the results of monitoring contained in any applicable requirement to Blue Ridge Regional Office no later than <u>March 1</u> and <u>September 1</u> of each calendar year. This report must be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:
  - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
  - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
    - (i) Exceedance of emission limitations or operational restrictions;
    - (ii) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission

limitations or operational restrictions; or,

- (iii)Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9VAC5-80-110 F)

### **D.** Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and to Blue Ridge Regional Office no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:

- 1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- 2. The identification of each term or condition of the permit that is the basis of the certification.
- 3. The compliance status.
- 4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- 5. Consistent with subsection 9VAC5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- 6. Such other facts as the permit may require to determine the compliance status of the source.
- 7. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3 APD Permits@epa.gov

(9VAC5-80-110 K.5)

### **E.** Permit Deviation Reporting

The permittee shall notify the Blue Ridge Regional Office, within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition X.C.3 of this permit.

(9VAC5-80-110 F.2 and 9VAC5-80-250)

### F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Blue Ridge Regional Office, by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9VAC5-40-50 C and 9VAC5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9VAC5-40-40 and 9VAC5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Blue Ridge Regional Office.

(9VAC5-20-180 C)

### G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9VAC5-80-110 G.1)

### H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9VAC5-80-110 G.2)

### I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9VAC5-80-110 G.3)

#### J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9VAC5-80-50, 9VAC5-80-1100, 9VAC5-80-1605, or 9VAC5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios. (9VAC5-80-190 and 9VAC5-80-260)

### **K.** Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9VAC5-80-110 G.5)

### L. Duty to Submit Information

- The permittee shall furnish to the Board, within a reasonable time, any information
  that the Board may request in writing to determine whether cause exists for
  modifying, revoking and reissuing, or terminating the permit or to determine
  compliance with the permit. Upon request, the permittee shall also furnish to the
  Board copies of records required to be kept by the permit and, for information
  claimed to be confidential, the permittee shall furnish such records to the Board along
  with a claim of confidentiality.
  (9VAC5-80-110 G.6)
- 2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9VAC5-80-80 G. (9VAC5-80-110 K.1)

### M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9VAC5-80-50 through 9VAC5-80-300 was issued shall pay permit fees consistent with the requirements of 9VAC5-80-310 through 9VAC5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. (9VAC5-80-110 H and 9VAC5-80-340 C)

### N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

- 2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- 3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
- 4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- 5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9VAC5-40-90 and 9VAC5-50-90)

### O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9VAC5-40-20 E and 9VAC5-50-20 E)

### P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9VAC5-80-110 J)

### Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- 1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- 2. Have access to and copy, at reasonable times, any records that must be kept under the

terms and conditions of the permit.

- 3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- 4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9VAC5-80-110 K.2)

### **R.** Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9VAC5-80-80 F.

- 1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- 2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9VAC5-80-110 D.

(9VAC5-80-110 L)

### S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request. (9VAC5-80-150 E)

#### T. Transfer of Permits

- 1. No person shall transfer a permit from one location to another, unless authorized under 9VAC5-80-130, or from one piece of equipment to another. (9VAC5-80-160)
- 2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall

comply with the requirements of 9VAC5-80-200. (9VAC5-80-160)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9VAC5-80-200. (9VAC5-80-160)

### U. Malfunction as an Affirmative Defense

- 1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
- 2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
  - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
  - b. The permitted facility was at the time being properly operated.
  - c. During the period of the malfunction, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in the permit.
  - d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirement of 9VAC5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirements under 9VAC5-20-180 C.
- 3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
- 4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9VAC5-80-250)

#### V. Permit Revocation or Termination for Cause

Custom Wood Products, LLC – Aerial Way Plant Permit Number: BRRO-21390 March 19, 2008, modified September 26, 2011 Page 34 of 35

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations. (9VAC5-80-190 C and 9VAC5-80-260)

### W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit. (9VAC5-80-80 E)

### X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

### Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).

(9VAC5-60-70 and 9VAC5-80-110 A.1)

### **Z.** Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

### AA. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (9VAC5-80-110 I)

### **BB.** Emissions Trading

Custom Wood Products, LLC – Aerial Way Plant Permit Number: BRRO-21390 March 19, 2008, modified September 26, 2011 Page 35 of 35

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- 1. All terms and conditions required under 9VAC5-80-110, except subsection N, shall be included to determine compliance.
- 2. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- 3. The owner shall meet all applicable requirements including the requirements of 9VAC5-80-50 through 9VAC5-80-300.

(9VAC5-80-110 I)